

Sub
AL

1. A web page generator for supplying web pages for display by a browser comprising:

- 5
- A) a template store with a plurality of templates, each template having a name, a body and selection criteria with at least two templates having the same name,
- 10
- B) an application store with at least one application that identifies templates by name,
- C) an interface for generating a modified user request that identifies one of the applications in said application store in response to a user request from a browser,
- 15
- D) an application manager responsive to the modified user request for processing a selected application including the identification of all the templates in said template store related to the application,
- 20
- E) a templates manager for selecting one of said templates in said template store according to a template name and selection criteria from said application manager, said application manager producing a representation of a web page in response to the body of each selected template that said interface converts into a form that is compatible with the user's web browser.

2. A web page generator as recited in claim 1 wherein said templates manager includes means responsive to a first request for a template from an application for generating a template object for each template in the application and a template set object for the application, said template set object identifying each template object and each template object identifying a corresponding template for retrieval.
3. A web page generator as recited in claim 2 wherein said templates manager includes a pointer to the template set object for the application.
4. A web page generator as recited in claim 3 wherein each template set object generated by said templates manager has a plurality of pointers to groups of template objects, wherein all template objects for the same template name are identified by the same pointer and wherein a single pointer can refer to template objects of different names, said templates manager including means for identifying a given pointer based upon a template name and means for thereafter selecting a specific template object and corresponding template from the identified group of template objects and templates.

- 5
- 5
- 5
- 5
5. A web page generator as recited in claim 4 wherein each template set object includes a pointer to a first location in a first chain of differently named template objects in the group and wherein each template object includes a pointer to another template object with the same name.
 6. A web page generator as recited in claim 5 wherein each template object a selection criterion associated therewith and the application defines at least one related criterion when it identifies a template, said templates manager including means for scoring each template object on the bases of a comparison of the application and template object criteria thereby to select a template object and template for use in the application.
 7. A web page generator as recited in claim 6 wherein said scoring means includes means for giving a score to each template and means for selecting from the list of templates with the same name the template with the first best score.
 8. A web page generator as recited in claim 6 wherein said template set object has a host table with a plurality of hash slots and said templates manager has a hash code

generator responsive to the template names for generating
the pointer to a group of template objects.

9. A web page generator as recited in claim 5 wherein said web page generator includes a plurality of related applications organized as a base layer and at least one application layer, said template set generating means generating, for an application layer, a template set object that includes the template objects in the application, the base and application layers and any intervening application layers.
10. A web page generator as recited in claim 9 wherein said template set object and template objects identified in one hash slot contain pointers to the template objects in the application and base layers and intervening application layers.
11. A web page generator as recited in claim 10 wherein for any application layer the template set object and template objects for a given template name are organized in a second chain with pointers to template objects and templates having the same name whereby selection of a specific template object and template is based upon

selection criteria from the application and in the template object.

- 5
12. A web page generator as recited in claim 11 wherein a pointer for each template object having the same name defines another template object to the same name and wherein the pointers collectively define a list of template objects that have the same name and that are ordered by their position in the application and base layers and any intervening application layers.
- 5
13. A web page generator as recited in claim 12 additionally comprising scoring means for selecting a specific template corresponding to a template object on the list of template objects, said scoring means including means for selecting from the list of templates with the same name the template with the first best score.
- 5
14. A web page development system comprising:
- A) a template store for templates, each template having a name, a body and selection criteria,
 - B) an application store for applications that include references to templates by name,
 - C) means for developing a new template for a web page and saving the new template in said template store,

10 D) a templates manager that generates a template set
object for that application identifies template
objects and corresponding templates and that
includes:

- 15 i) means responsive to the act of saving a new
template for a given application for retrieving
the template set object for the given
application,
- ii) means for generating a template object including
the new template name and reference to the given
application, and
- 20 iii) means for adding the new template object to the
template set object at a predetermined location
therein.

15. A web page development system as recited in claim 14
wherein system has a base layer and applications organized
in a hierarchy of application layers, said adding means
includes base layer and application layer adding means for
adding a new template object in the template set objects
for the base layer and an application layer respectively.

16. A web page development system as recited in claim 15
wherein said application layer adding means includes means
for incorporating information from corresponding template

5 set objects from the base layer and any intervening application layers.

5 17. A web page development system as recited in claim 16 wherein each of said template set objects includes a hash table for identifying the location of template objects and wherein said application layer adding means includes means for copying each template set object hash table entry from a given layer to a corresponding template set object in a higher layer whereby the template set object for the higher layer inherits all of the templates in previous layers.

5 18. A web page development system as recited in claim 15 wherein a template is saved in the base layer, said base layer adding means including means for replicating certain information from the template set object for the base layer into each template set object in a higher layer in the hierarchy.

5 19. A web page development system as recited in claim 18 wherein the base layer template set object has a hash table with an entry for each template name and said base layer adding means includes means for incorporating the information in the hash table entry for the template being

saved into the corresponding hash table entry for each template set object in a higher layer in the hierarchy.

20. A web page development system as recited in claim 14 wherein the template being saved has the same name as other templates identified in the template set object and wherein said incorporating means includes means for positioning template at a predetermined position in a homonym chain with pointers to templates with the same name.
21. A web page development system as recited in claim 20 wherein templates with the same name exist in different layers, said template positioning means including means for placing a pointer to be the first template object in the homonym chain in the template set object for the given application and for placing the pointer to the second position of the homonym chain for any higher application layer whereby in the higher application layer the pointer to the new template object is located immediately after the first template object in the homonym list and before any previously processed template objects.
22. A web page development system as recited in claim 14 wherein the template set object includes pointers to a

5 plurality of chains and wherein each chain can include a reference to a templates with different names, said adding means including means for storing a pointer to the template being saved at a predetermined position in a corresponding chain.

5 23. A web page development system as recited in claim 22 wherein the pointers to the plurality of chains is maintained in a hash table with a predetermined number of slots and wherein the hash code for one template name can be a duplicate of a hash code for another template name, said adding means including means for establishing a collision chain for each hash code identifying each template in the application layer, the base layer and any intervening layers identified by the same hash code.

5 24. A web page development system as recited in claim 23 wherein said adding means includes means for positioning the pointer to the template being saved at the beginning of the collision chain for the template set object corresponding to the application.

25. A web page development system as recited in claim 22 wherein the template being saved has the same name as other templates identified in the template set object and

5 wherein said incorporating means includes means for positioning template at a predetermined position in a homonym chain with pointers for templates with the same name.

26. A web page development system as recited in claim 25 wherein templates with the same name exist in different layers, said template positioning means including means for placing a pointer to be the first template object in the homonym chain in the template set object for the given application and for placing the pointer to the second position of the homonym chain for any higher application layer whereby in the higher application layer the pointer to the new template object is located immediately after the first template object in the homonym chain and before any previously processed template objects.